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The Examiner's attention is directed to the fact that Eleftheriadis *et al* fails to disclose Applicants' concept of allocating a target frame bit rate among the at least one object, wherein said allocating step comprises the step of allocating said target frame bit rate in accordance with a target object bit rate for the at least one object. Specifically, Applicants' claim 22 positively recites:

> 22. A method for allocating bits to encode each frame of an image sequence, each of said frame having at least one object, said method comprising the steps of:
> (a) determining a target frame bit rate for the frame; and
> (b) allocating said target frame bit rate among the at least one object, wherein said allocating step comprises the step of allocating said target frame bit rate in accordance with a target object bit rate for the at least one object. (emphasis added)

In brief, Applicants disclose the novel concept of computing a target object bit rate for each object and then allocating a target frame bit rate among the objects in accordance with their computed target object bit rates. This concept is absent in the Eleftheriadis *et al* patent.

Specifically, the Examiner cited Column 11, line 53 to Column 12, line 32 in the Eleftheriadis *et al.* patent as disclosing this concept. However, a close reading of the cited section in the Eleftheriadis *et al* patent revealed that there is no disclosure as to the computation of a target frame bit rate that is then allocated among the objects in accordance with the objects' target bit rates. Instead, Eleftheriadis *et al.* states that:

> "In accordance with that technique, each object is associated with a particular target average bit rate R_i, i=1, . . . , n-1, except for the background (object n). In order to maintain the given total average rate R necessary to prevent buffer overflow, the background rate is determined according to the formula:
>
> $\sum_{i=0}^{n} \alpha_i R_i = R$ where α_i is the proportion (from 0.0 to 1.0) of the pixels in the frame that belong to object i. (Emphasis added, See, Eleftheriadis, Column 11, line 67 to Column 12, line 10)

Thus, Eleftheriadis *et al.* is simply disclosing an allocation approach where the average rate R necessary to prevent buffer overflow is used to compute the background rate. Eleftheriadis *et al.* also defines "R is the average output bit rate to be maintained by the buffer 1020". (See Eleftheriadis *et al.*, Column 13, lines 31-32). In other words, R represents a measure of the physical buffer "fullness" and it is **not** a "target frame bit rate" as claimed by the Applicants. Namely, Eleftheriadis *et al.*'s teaching of using the

average output bit rate of a physical buffer to compute a background rate would not anticipate Applicants' invention that recites the novel concept of computing a target object bit rate for each object and then allocating a target frame bit rate among the objects in accordance with their computed target object bit rates.

As such, claim 22 is not anticipated by Eleftheriadis *et al.* and satisfies the requirements of 35 U.S.C. § 102.

B. Claims 22-28 and 32-38

Separately, the Examiner in Paragraphs 8-9 of the Office Action again rejected claims 22-28 and 32-38 as being anticipated over the Sun *et al.* patent (United States patent 5,790,196 issued August 4, 1998). The rejection is respectfully traversed.

The Sun *et al.* patent was filed on February 14, 1997. The Applicants previously submitted that they conceived and reduced their invention to practice, as presently claimed, prior to the filing date of the Sun *et al.* patent. In support of this submission, the Applicants previously enclosed a declaration under 37 CFR 1.131 on April 5, 1999, (in the parent application, US patent # 6,023,296) that declares a conception date for the invention claimed in the above-identified patent application to be on or before February 14, 1997 and that due diligence was exercised toward reducing the invention to practice.

Responsive to an Office Action in the parent application, Applicants again enclose a second declaration dated June 23, 1999 under 37 CFR 1.131 along with a printout of video sequence files that were obtained as test sets for the present invention. The date next to each file is the date the video file was obtained for testing. In addition, a table of simulation results using some of these standard video sequences accompanies the second 1.131 declaration. Thus, Applicants submit that these two declarations contain the necessary facts and documentation required to establish priority of the invention.

The Examiner indicated in Paragraph 3 of the Office Action that declarations filed during the prosecution of the parent application do not automatically become a part of this application. The Examiner indicated that Applicants should make those remarks of record in the present application by providing copies of these declarations.

Responsive to the Examiner, Applicants **did** in fact provide copies of those declarations in Applicants' response to the Office Action dated February 14, 2002. In any event, Applicants are attaching copies of the cited declarations with this Response

as well. If the Examiner does not receive these declarations, it is respectfully requested that the Examiner contact Applicants' representative.

In view of these declarations, the Sun *et al.* patent is not prior art to the Applicants' invention. Thus, claims 22-28 and 32-38 are not anticipated by Sun *et al.* and satisfy the requirements of 35 U.S.C. § 102.

II. REJECTION OF CLAIMS 29-31 UNDER 35 U.S.C. § 103

The Examiner in Paragraphs 10-11 of the Office Action again rejected claims 29-31 as being unpatentable over Sun in view of Gunnewiek et al. The rejection is respectfully traversed.

For the same reason discussed above, since Applicants conceived the present invention before the filing date of the Sun *et al.* reference, the Sun *et al.* reference cannot be used in combination with Gunnewiek et al. as the foundation of an obviousness rejection. Since Gunnewiek et al. singly would not make Applicants' invention obvious as acknowledged by the Examiner, claims 29-31 fully satisfy the requirements of 35 U.S.C. § 103 and are patentable thereunder.

Conclusion

Thus, the Applicants submit that none of the claims, presently in the application, is anticipated or obvious under the provisions of 35 U.S.C. § 102 and 35 U.S.C. § 103. Consequently, the Applicants believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring the issuance of an adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Kin-Wah Tong, Esq. at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

10/31/02

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